Fond du Lac Tribal and Community College
COURSE OUTLINE FORM

Updated 11/25/14

Please return this form to the college vice president of academic affairs and the chairperson of the Academic Affairs and Standards Council (AASC)

1. Prepared by: ________________________________________________________

2. Date submitted: _____________________________________________________

3. Date approved: ____________ Date revised __03/25/15__

4. Department/discipline: ___ Physical Education/Geography ________________

5. Department(s) endorsement(s): _______________________________________
(Signatures of the person(s) providing the endorsement are required.)

6. Course Title: __ Using GPS: Geocaching and Field Mapping _____________
Abbreviated course title (25 characters or less): ____________________________

7. Course Designator: ___PE/GEOG ________ 8. Course Level: 1054

9. Number of Credits: Lecture ____________ Lab ___1__ (Repeatable) ________

10. Control Number (on site) ____20____ Control Number (online)__________

11. Catalog/Course description:
Curious about how to use a GPS unit? This course will inform students about the Global Positioning System (GPS) through both conceptual and hands-on applications, such as geocaching and field data collection. GIS software and associated applications will also be introduced.

12. Course prerequisite(s) or co-requisite(s): Accuplacer scores/ Other courses
Prerequisite(s):
Co-requisite:

13. Course Materials (Recommended course materials and resources. List all that apply, e.g. textbooks, workbooks, study guides, lab manuals, videos, guest lecturers).

Text: Determined on a yearly basis depending on availability and content
Additional resources:
Handheld GPS receivers and associated accessories
GIS Lab (Room 208) with Esri’s ArcGIS software installed on networked PCs
Outdoor activities locally
Supplemental resources

14. Course Content (Provide an outline of major topics covered in course)

GPS Concepts – Satellites and the DoD
GPS Positioning Modes
Differential Corrections – Accuracy
Selective Availability – Accuracy
Pros and Cons of GPS
Datums, Coordinate Systems, and Map Projections
Who uses GPS and what are they using it for? (GPS Application)
Hands-on operation of a GPS receiver
Integrate position data collected with a GPS unit with GIS software
Responsible geocaching

15. Learning Goals, Outcomes, and Assessment
At FDLTCC we have 4 Competencies Across the Curriculum (CAC) areas. They are as follows:

A. Information Literacy (the ability to use print and/or non-print tools effectively for the
discovery, acquisition, and evaluation of information)
B. Ability to Communicate (the ability to listen, read, comprehend, and/or deliver
information in a variety of formats.)
C. Problem Solving (the ability to conceptualize, apply, analyze, synthesize, and/or evaluate
information to formulate and solve problems.)
D. Culture (knowledge of Anishinaabe traditions and culture, knowledge of one’s own
traditions and culture, knowledge of others’ traditions and cultures, culture of work,
culture of academic disciplines and/or respect for global diversity.)

Course Learning Outcomes will fulfill the identified competencies.

Course Learning Outcomes.

Upon completion of this course, the student will be able to:

1. Describe the global positioning system and how it works (A, B)
2. Identify the differences between recreational-grade and map-grade GPS receivers (A)
3. Identify applications of GPS (A, B, C)
4. Operate a GPS receiver to locate a geocache (A, C)
5. Perform responsible geocaching (C, D)
6. Collect data from the field (A, C)
7. Apply programming to complete an activity (C)

16. Minnesota Transfer Curriculum (MnTC): If this course fulfills an MnTC goal area, state
the goal area and list the goals and outcomes below:

See www.mntransfer.org

Goal Area(s):